



Figure 9.14 To prepare a rotational tween, rotate the object in the keyframe that ends the sequence.

Rotating and Spinning Objects

You cannot create tweens of rotating and spinning objects quite as simply as you create the types of tweens presented in the previous exercises. That's because you can't accurately describe rotation with just two keyframes. Imagine, for example, trying to rotate the pointer of a compass 180 degrees so that it turns from pointing north to pointing south. The initial keyframe contains the pointer pointing up; the ending keyframe contains the pointer pointing down. But how should the pointer move to reach that position? Flash has three choices, rotate the pointer clockwise, rotate it counterclockwise, or simply flip it upside-down. Trying to describe the pointer spinning all the way around the compass in just two keyframes would be even less informative, since the beginning and ending keyframes would be identical.

To clarify the motion, you could create a series of keyframes rotating the pointer a few degrees in each one. That method is tedious, however, and adds to the file size of the final exported movie. Fortunately, Flash's Frame Properties dialog box lets you provide extra information about tweens so Flash can create rotational tweens with just two keyframes.

To rotate an object less than 360 degrees:

1. Create a new Flash document.
2. On the Stage, in Frame 1, create a new object (or place a symbol instance).
Be sure to use an object that will look different at various stages of its rotation.
3. If you've created a new object, select it and choose **Modify > Group** or choose **Insert > Convert to Symbol**.

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